SEQUENCE LISTING

<110> RONSIN, CHRISTOPHE
SCOTT, VERONIQUE
TRIEBEL, FREDERIC

<120> PEPTIDE COMPOUND DERIVED FROM A SHIFTED ORF OF THE ICE GENE

<130> 065691-0263

<140> 10/019,219
<141> 2001-12-28

<150> PCT/FR00/01791
<151> 2000-06-27

<150> FR 99/08224
<151> 1999-06-28

<160> 9

<170> PatentIn Ver. 2.1

<210> 1
<211> 162
<212> PRT
<213> Homo sapiens

<400> 1

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Cys Trp Leu Pro Trp Arg Thr Trp Trp Trp Ser Ser Ser Ser Thr Ala
             20                  25                  30

Trp Val Ser Trp Ala Ser Ser Ala Leu Glu Thr Ser Thr Gln Pro Ala
         35                  40                  45

Thr Gly Ala Thr Trp Thr Lys Trp Leu His Tyr Ala Gly Ser Ser Arg
     50                  55                  60

Ile Ser Pro Thr Leu Glu Ala Thr Leu Thr Val Ser Pro Phe Leu Ala
 65                  70                  75                  80

Ser Leu Arg Val Ala Arg Val Cys Leu Arg Leu Leu Cys Pro Pro Tyr
                 85                  90                  95

Pro Lys Asp Ser Ser Thr Glu Pro Ser Trp Arg Val Ala Trp Pro Ser
            100                 105                 110

Cys Pro Ala Ser Leu Pro Ala Gln Leu Met Ser Ser Pro Arg Trp Trp
        115                 120                 125

Pro Thr Cys Leu Pro Val Thr Lys Leu Thr Leu Arg Pro Trp Trp Ala
    130                 135                 140
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Ala Cys Gly Ala Arg Val Lys Arg Arg Phe Leu Gln Leu Thr Ser Leu
145 150 155 160

Ser Arg

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Ser Pro Arg Trp Trp Pro Thr Cys Leu
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ctggagacaa gcacgcaacc ggcaactggg gctacctgga ccaagtggct gcactacgct 180
gggtccagca gaatatcgcc cactttggag gcaaccctga ccgtgtcacc atttttggcg 240
agtctgcggg tggcacgagt gtgtcttcgc ttgttgtgtc ccccatatcc caaggactct 300
tccacggagc catcatggag agtggcgtgg ccctcctgcc cggcctcatt gccagctcag 360
ctgatgtcat ctccacggtg gtggccaacc tgtctgcctg tgaccaagtt gactctgagg 420
ccctggtggg ctgcctgcgg ggcaagagta aagaggagat tcttgcaatt aacaagcctt 480
tcaagatgat ccccggagtg gtggatgggg tcttcctgcc c 521

<210> 4
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

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<210> 5
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<220>
<223> Description of Artificial Sequence: Primer

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<213> Homo sapiens

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Met Arg Leu His Arg Leu Arg Ala Arg Leu Ser Ala Val Ala Cys Gly
  1               5                  10                  15

ctt ctg ctg ctt ctt gtc cgg ggc cag ggc cag gac tca gcc agt ccc   96
Leu Leu Leu Leu Leu Val Arg Gly Gln Gly Gln Asp Ser Ala Ser Pro
             20                  25                  30

atc cgg acc aca cac acg ggg cag gtg ctg ggg agt ctt gtc cat gtg   144
Ile Arg Thr Thr His Thr Gly Gln Val Leu Gly Ser Leu Val His Val
         35                  40                  45

aag ggc gcc aat gcc ggg gtc caa acc ttc ctg gga att cca ttt gcc   192
Lys Gly Ala Asn Ala Gly Val Gln Thr Phe Leu Gly Ile Pro Phe Ala
     50                  55                  60

aag cca cct cta ggt ccg ctg cga ttt gca ccc cct gag ccc cct gaa   240
Lys Pro Pro Leu Gly Pro Leu Arg Phe Ala Pro Pro Glu Pro Pro Glu
 65                  70                  75                  80

tct tgg agt ggt gtg agg gat gga acc acc cat ccg gcc atg tgt cta   288
Ser Trp Ser Gly Val Arg Asp Gly Thr Thr His Pro Ala Met Cys Leu
                 85                  90                  95

cag gac ctc acc gca gtg gag tca gag ttt ctt agc cag ttc aac atg   336
Gln Asp Leu Thr Ala Val Glu Ser Glu Phe Leu Ser Gln Phe Asn Met
            100                 105                 110

acc ttc cct tcc gac tcc atg tct gag gac tgc ctg tac ctc agc atc   384
Thr Phe Pro Ser Asp Ser Met Ser Glu Asp Cys Leu Tyr Leu Ser Ile
        115                 120                 125

tac acg ccg gcc cat agc cat gaa ggc tct aac ctg ccg gtg atg gtg   432
Tyr Thr Pro Ala His Ser His Glu Gly Ser Asn Leu Pro Val Met Val
    130                 135                 140

tgg atc cac ggt ggt gcg ctt gtt ttt ggc atg gct tcc ttg tat gat   480
Trp Ile His Gly Gly Ala Leu Val Phe Gly Met Ala Ser Leu Tyr Asp
145                 150                 155                 160

ggt tcc atg ctg gct gcc ttg gag aac gtg gtg gtg gtc atc atc cag   528
Gly Ser Met Leu Ala Ala Leu Glu Asn Val Val Val Val Ile Ile Gln
                165                 170                 175

tac cgc ctg ggt gtc ctg ggc ttc ttc agc act gga gac aag cac gca   576
Tyr Arg Leu Gly Val Leu Gly Phe Phe Ser Thr Gly Asp Lys His Ala
            180                 185                 190
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acc ggc aac tgg ggc tac ctg gac caa gtg gct gca cta cgc tgg gtc   624
Thr Gly Asn Trp Gly Tyr Leu Asp Gln Val Ala Ala Leu Arg Trp Val
        195                 200                 205

cag cag aat atc gcc cac ttt gga ggc aac cct gac cgt gtc acc att   672
Gln Gln Asn Ile Ala His Phe Gly Gly Asn Pro Asp Arg Val Thr Ile
    210                 215                 220

ttt ggc gag tct gcg ggt ggc acg agt gtg tct tcg ctt gtt gtg tcc   720
Phe Gly Glu Ser Ala Gly Gly Thr Ser Val Ser Ser Leu Val Val Ser
225                 230                 235                 240

ccc ata tcc caa gga ctc ttc cac gga gcc atc atg gag agt ggc gtg   768
Pro Ile Ser Gln Gly Leu Phe His Gly Ala Ile Met Glu Ser Gly Val
                245                 250                 255

gcc ctc ctg ccc ggc ctc att gcc agc tca gct gat gtc atc tcc acg   816
Ala Leu Leu Pro Gly Leu Ile Ala Ser Ser Ala Asp Val Ile Ser Thr
            260                 265                 270

gtg gtg gcc aac ctg tct gcc tgt gac caa gtt gac tct gag gcc ctg   864
Val Val Ala Asn Leu Ser Ala Cys Asp Gln Val Asp Ser Glu Ala Leu
        275                 280                 285

gtg ggc tgc ctg cgg ggc aag agt aaa gag gag att ctt gca att aac   912
Val Gly Cys Leu Arg Gly Lys Ser Lys Glu Glu Ile Leu Ala Ile Asn
    290                 295                 300

aag cct ttc aag atg atc ccc gga gtg gtg gat ggg gtc ttc ctg ccc   960
Lys Pro Phe Lys Met Ile Pro Gly Val Val Asp Gly Val Phe Leu Pro
305                 310                 315                 320

agg cac ccc cag gag ctg ctg gcc tct gcc gac ttt cag cct gtc cct   1008
Arg His Pro Gln Glu Leu Leu Ala Ser Ala Asp Phe Gln Pro Val Pro
                325                 330                 335

agc att gtt ggt gtc aac aac aat gaa ttc ggc tgg ctc atc ccc aag   1056
Ser Ile Val Gly Val Asn Asn Asn Glu Phe Gly Trp Leu Ile Pro Lys
            340                 345                 350

gtc atg agg atc tat gat acc cag aag gaa atg gac aga gag gcc tcc   1104
Val Met Arg Ile Tyr Asp Thr Gln Lys Glu Met Asp Arg Glu Ala Ser
        355                 360                 365

cag gct gct ctg cag aaa atg tta acg ctg ctg atg ttg cct cct aca   1152
Gln Ala Ala Leu Gln Lys Met Leu Thr Leu Leu Met Leu Pro Pro Thr
    370                 375                 380

ttt ggt gac ctg ctg agg gag gag tac att ggg gac aat ggg gat ccc   1200
Phe Gly Asp Leu Leu Arg Glu Glu Tyr Ile Gly Asp Asn Gly Asp Pro
385                 390                 395                 400

cag acc ctc caa gcg cag ttc cag gag atg atg gcg gac tcc atg ttt   1248
Gln Thr Leu Gln Ala Gln Phe Gln Glu Met Met Ala Asp Ser Met Phe
                405                 410                 415
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gtg atc cct gca ctc caa gta gca cat ttt cag tgt tcc cgg gcc cct   1296
Val Ile Pro Ala Leu Gln Val Ala His Phe Gln Cys Ser Arg Ala Pro
            420                 425                 430

gtg tac ttc tac gag ttc cag cat cag ccc agc tgg ctc aag aac atc   1344
Val Tyr Phe Tyr Glu Phe Gln His Gln Pro Ser Trp Leu Lys Asn Ile
        435                 440                 445

agg cca ccg cac atg aag gca gac cat ggt gat gag ctt cct ttt gtt   1392
Arg Pro Pro His Met Lys Ala Asp His Gly Asp Glu Leu Pro Phe Val
    450                 455                 460

ttc aga agt ttc ttt ggg ggc aac tac att aaa ttc act gag gaa gag   1440
Phe Arg Ser Phe Phe Gly Gly Asn Tyr Ile Lys Phe Thr Glu Glu Glu
465                 470                 475                 480

gag cag cta agc agg aag atg atg aag tac tgg gcc aac ttt gcg aga   1488
Glu Gln Leu Ser Arg Lys Met Met Lys Tyr Trp Ala Asn Phe Ala Arg
                485                 490                 495

aat ggg aac ccc aat ggc gag ggt ctg cca cac tgg ccg ctg ttc gac   1536
Asn Gly Asn Pro Asn Gly Glu Gly Leu Pro His Trp Pro Leu Phe Asp
            500                 505                 510

cag gag gag caa tac ctg cag ctg aac cta cag cct gcg gtg ggc cgg   1584
Gln Glu Glu Gln Tyr Leu Gln Leu Asn Leu Gln Pro Ala Val Gly Arg
        515                 520                 525

gct ctg aag gcc cac agg ctc cag ttc tgg aag aag gcg ctg ccc caa   1632
Ala Leu Lys Ala His Arg Leu Gln Phe Trp Lys Lys Ala Leu Pro Gln
    530                 535                 540

aag atc cag gag ctc gag gag cct gaa gag aga cac aca gag ctg tag   1680
Lys Ile Gln Glu Leu Glu Glu Pro Glu Glu Arg His Thr Glu Leu
545                 550                 555
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<210> 7
<211> 559
<212> PRT
<213> Homo sapiens

<400> 7

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Met Arg Leu His Arg Leu Arg Ala Arg Leu Ser Ala Val Ala Cys Gly
  1               5                  10                  15

Leu Leu Leu Leu Leu Val Arg Gly Gln Gly Gln Asp Ser Ala Ser Pro
            20                  25                  30

Ile Arg Thr Thr His Thr Gly Gln Val Leu Gly Ser Leu Val His Val
        35                  40                  45

Lys Gly Ala Asn Ala Gly Val Gln Thr Phe Leu Gly Ile Pro Phe Ala
    50                  55                  60

Lys Pro Pro Leu Gly Pro Leu Arg Phe Ala Pro Pro Glu Pro Pro Glu
65                  70                  75                  80
```

```
Ser Trp Ser Gly Val Arg Asp Gly Thr Thr His Pro Ala Met Cys Leu
                 85                  90                  95

Gln Asp Leu Thr Ala Val Glu Ser Glu Phe Leu Ser Gln Phe Asn Met
            100                 105                 110

Thr Phe Pro Ser Asp Ser Met Ser Glu Asp Cys Leu Tyr Leu Ser Ile
        115                 120                 125

Tyr Thr Pro Ala His Ser His Glu Gly Ser Asn Leu Pro Val Met Val
    130                 135                 140

Trp Ile His Gly Gly Ala Leu Val Phe Gly Met Ala Ser Leu Tyr Asp
145                 150                 155                 160

Gly Ser Met Leu Ala Ala Leu Glu Asn Val Val Val Val Ile Ile Gln
                165                 170                 175

Tyr Arg Leu Gly Val Leu Gly Phe Phe Ser Thr Gly Asp Lys His Ala
            180                 185                 190

Thr Gly Asn Trp Gly Tyr Leu Asp Gln Val Ala Ala Leu Arg Trp Val
        195                 200                 205

Gln Gln Asn Ile Ala His Phe Gly Gly Asn Pro Asp Arg Val Thr Ile
    210                 215                 220

Phe Gly Glu Ser Ala Gly Gly Thr Ser Val Ser Ser Leu Val Val Ser
225                 230                 235                 240

Pro Ile Ser Gln Gly Leu Phe His Gly Ala Ile Met Glu Ser Gly Val
                245                 250                 255

Ala Leu Leu Pro Gly Leu Ile Ala Ser Ser Ala Asp Val Ile Ser Thr
            260                 265                 270

Val Val Ala Asn Leu Ser Ala Cys Asp Gln Val Asp Ser Glu Ala Leu
        275                 280                 285

Val Gly Cys Leu Arg Gly Lys Ser Lys Glu Glu Ile Leu Ala Ile Asn
    290                 295                 300

Lys Pro Phe Lys Met Ile Pro Gly Val Val Asp Gly Val Phe Leu Pro
305                 310                 315                 320

Arg His Pro Gln Glu Leu Leu Ala Ser Ala Asp Phe Gln Pro Val Pro
                325                 330                 335

Ser Ile Val Gly Val Asn Asn Asn Glu Phe Gly Trp Leu Ile Pro Lys
            340                 345                 350

Val Met Arg Ile Tyr Asp Thr Gln Lys Glu Met Asp Arg Glu Ala Ser
        355                 360                 365

Gln Ala Ala Leu Gln Lys Met Leu Thr Leu Leu Met Leu Pro Pro Thr
    370                 375                 380
```

```
Phe Gly Asp Leu Leu Arg Glu Glu Tyr Ile Gly Asp Asn Gly Asp Pro
385                 390                 395                 400

Gln Thr Leu Gln Ala Gln Phe Gln Glu Met Met Ala Asp Ser Met Phe
                405                 410                 415

Val Ile Pro Ala Leu Gln Val Ala His Phe Gln Cys Ser Arg Ala Pro
            420                 425                 430

Val Tyr Phe Tyr Glu Phe Gln His Gln Pro Ser Trp Leu Lys Asn Ile
        435                 440                 445

Arg Pro Pro His Met Lys Ala Asp His Gly Asp Glu Leu Pro Phe Val
    450                 455                 460

Phe Arg Ser Phe Phe Gly Gly Asn Tyr Ile Lys Phe Thr Glu Glu Glu
465                 470                 475                 480

Glu Gln Leu Ser Arg Lys Met Met Lys Tyr Trp Ala Asn Phe Ala Arg
                485                 490                 495

Asn Gly Asn Pro Asn Gly Glu Gly Leu Pro His Trp Pro Leu Phe Asp
            500                 505                 510

Gln Glu Glu Gln Tyr Leu Gln Leu Asn Leu Gln Pro Ala Val Gly Arg
        515                 520                 525

Ala Leu Lys Ala His Arg Leu Gln Phe Trp Lys Lys Ala Leu Pro Gln
    530                 535                 540

Lys Ile Gln Glu Leu Glu Glu Pro Glu Glu Arg His Thr Glu Leu
545                 550                 555
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<210> 8
<211> 166
<212> PRT
<213> Homo sapiens

<400> 8

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Trp Cys Gly Ser Thr Val Val Arg Leu Phe Leu Ala Trp Leu Pro Cys
  1               5                  10                  15

Met Met Val Pro Cys Trp Leu Pro Trp Arg Thr Trp Trp Trp Ser Ser
             20                  25                  30

Ser Ser Thr Ala Trp Val Ser Trp Ala Ser Ser Ala Leu Glu Thr Ser
         35                  40                  45

Thr Gln Pro Ala Thr Gly Ala Thr Trp Thr Lys Trp Leu His Tyr Ala
     50                  55                  60

Gly Ser Ser Arg Ile Ser Pro Thr Leu Glu Ala Thr Leu Thr Val Ser
 65                  70                  75                  80

Pro Phe Leu Ala Ser Leu Arg Val Ala Arg Val Cys Leu Arg Leu Leu
                 85                  90                  95
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Cys Pro Pro Tyr Pro Lys Asp Ser Ser Thr Glu Pro Ser Trp Arg Val
100 105 110

Ala Trp Pro Ser Cys Pro Ala Ser Leu Pro Ala Gln Leu Met Ser Ser
115 120 125

Pro Arg Trp Trp Pro Thr Cys Leu Pro Val Thr Lys Leu Thr Leu Arg
130 135 140

Pro Trp Trp Ala Ala Cys Gly Ala Arg Val Lys Arg Arg Phe Leu Gln
145 150 155 160

Leu Thr Ser Leu Ser Arg
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<210> 9
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<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

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